

**FORTINET®**

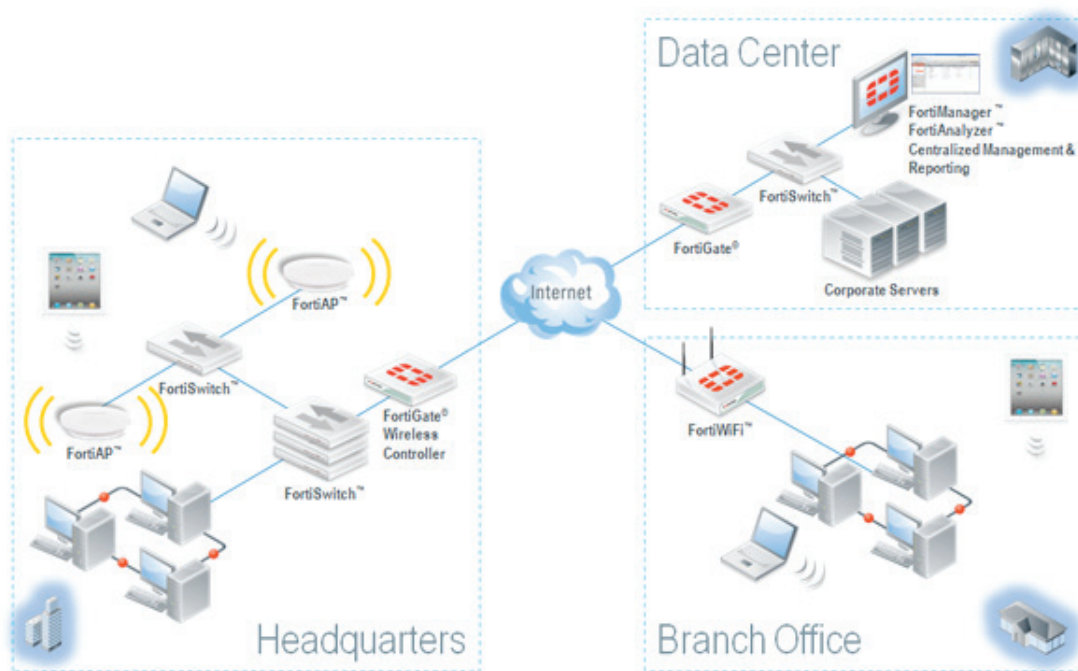
High Performance Network Security

# WIRELESS PRODUCT MATRIX

NOVEMBER 2014



## Fortinet Products for Wireless Solution



### Thin AP - FortiAP

Organizations deploying the NP (Network Processor) 6 powered FortiGate 1000 Series firewalls at their data center will enjoy superior protection and performance with industry-leading, high capacity firewall technologies that deliver exceptional throughput and ultra-low latency, enabling the security, flexibility, scalability and manageability expected on a core platform. These firewalls come with numerous high-speed 40 GbE and 10 GbE interfaces which are ideal for segmenting network physically. Running on the latest FortiOS, these platform are virtualization and cloud-ready. They support next-generation data center architectures, multi-tenant requirements, provides APIs for rapid orchestration and easy integration with 3rd party ecosystems.

### Thick AP - FortiWiFi

FortiWiFi Thick Access Points are a consolidated appliance that integrates wireless AP capabilities into the FortiGate network security platform, making it ideal for small and medium business, distributed enterprise or branch office deployments. Each FortiWiFi provides secure access to both the wired and wireless LAN, as well as various WAN connections, in a cost-effective device.

### Wireless Controller - FortiGate

The FortiGate network security platform acts as a wireless controller for FortiAP Thin Access Points, while providing firewall, VPN, intrusion prevention, application control, web filtering and many other security and networking capabilities. There are FortiGate platforms to meet the requirements of any network, from small businesses to large enterprises and service providers.






### Presence Analytics - FortiPresence

FortiPresence enables brick-and-mortar retailers to better understand customer behavior, including when they come into the store, how long they stay, and if they are a new or repeat customer. By combining statistical analytics with a sophisticated customer engagement engine, retailers are able to influence customers purchasing decisions to increase sales.




### WLAN Planning Utility - FortiPlanner

FortiPlanner WLAN Planning Utility is a graphical wireless LAN planning and post-deployment site survey utility, designed to simplify WLAN planning and deployment of Fortinet FortiAP based wireless networks.


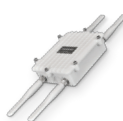

# FortiAP™ Indoor Thin Access Points

	FAP-210B	FAP-221B/223B	FAP-221C	FAP-320B	FAP-320C
					
Product Description	Indoor Access Point	Indoor Access Point / with external antennas	802.11ac Indoor Access Point	802.11n Enterprise Access Point	802.11ac Enterprise Access Point
Suggested Deployment	Indoor Motels, Clinics, Small Enterprise, Retail	Indoor Medium Enterprise, Hotels, Healthcare, Advanced Schools and Retail	Indoor Medium Enterprise, Hotels, Healthcare, Advanced Schools and Retail	Indoor Enterprises, Hotels, Healthcare, Advanced Schools, warehouse and Retail	Indoor Enterprises, Hotels, Healthcare, warehouse, Advanced Schools and Retail
<b>Hardware</b>					
Form Factor	Square	Round	Round	Square	Square
Dimension	1.1x6.4x5.1 in	6.5 x 1.2 in	6.5 x 1.5 in	6.5 x 6.5 x 1.6 in	6.5 x 6.5 x 1.4 in
Mounting	Wall; Ceiling with optional bracket	Drywall/T-Rail/Ceiling mounts included	Drywall/T-Rail/Ceiling mounts included	Drywall/T-Rail/Ceiling mounts included	Drywall/T-Rail/Ceiling mounts included
Kensington Lock	•	•	•	•	•
Ethernet Interfaces	1x GE RJ45	1x GE RJ45	1x GE RJ45	2x GE RJ45	2x GE RJ45
PoE	802.3af	802.3af	802.3af	802.3af	802.3af
Maximum power draw	12.9 W	12.9 W	12.9 W	12.9W	12.9W
Included accessories	AC adaptor, anchors	Mounting kits, anchors	Mounting kits, anchors	Mounting kits, anchors	Mounting kits, anchors
Resilient POE backup				•	•
Plenum installable				•	•
Mesh capable	•	•	•	•	•
<b>Wireless</b>					
IEEE Standard	802.11 a/b/g/n	802.11 a/b/g/n	802.11 a/b/g/n/ac	802.11 a/b/g/n	802.11 a/b/g/n/ac
Number of Radios	1	2	2	2	2
Radio Band	Dual	Dual	Dual	Dual	Dual
Radio 1 Band (association rate)	2.4 GHz / 5GHz (300 Mbps)	221B: 2.4 GHz / 5GHz, 223B: 5 GHz (300 Mbps)	2.4 GHz / 5GHz (300 Mbps)	2.4 GHz (450 Mbps)	2.4 GHz (450 Mbps)
Radio 2 Band (association rate)	-	2.4 GHz	5GHz (867 Mbps)	5 GHz (450 Mbps)	5 GHz (1300 Mbps)
MIMO	2x2 (dual stream)	2x2 (dual stream)	2x2 (dual stream)	3x3 (3 stream)	3x3 (3 stream)
Max / recommended number of concurrent clients	no limit / 30	no limit / 30 per radio	no limit / 30 per radio	no limit / 50 per radio	no limit / 50 per radio
Antenna Type and Count	2 - Internal	221B: 4 - Internal 223B: 4 - External	4 - Internal	6 - Internal	6 - Internal
Antenna Gain	3dBi/(4dBi-5GHz)	3dBi/(4dBi-5GHz)	3.5dBi/(6dBi-5GHz)	5dBi/(6dBi-5GHz)	5dBi/(6dBi-5GHz)
Max TX Power	17 dBm (50mW)	17 dBm (50mW)	20 dBm (100mW)	24 dBm (250mW)	21 dBm (126mW)
Number of SSIDs	8 (7 client, 1 monitor)	16 (14 client, 2 monitor)	16 (14 client, 2 monitor)	16 (14 client, 2 monitor)	16
Traffic Queues	4 queues	4 queues	4 queues	4 queues	4 queues
802.11n 20/40Mhz HT	•	•	•	•	•
802.11n MPDU/MSDU agg		•	•	•	•
802.11n Dynamic MIMO PS		•	•	•	•
802.11n LDPC encoding		•	•	•	•
802.11n MLD		•	•	•	•
802.11n Max ratio combining		•	•	•	•
802.11ac 80 MHz channel			•		•
<b>Rogue AP scanning</b>					
Dual Band Scanning	•	•	•	•	•
Background Scan	•	•		•	
Full-time dedicated monitor	•	•	•	•	•
Single Radio Dual band scanning		•	•		
On-wire MAC address collector	•	•	•	•	•
<b>Management</b>					
WebUI & CLI	•	•	•	•	•
External serial console port	•			•	•
Cloud deployment/management	•	•	•	•	•
Controller discovery: DNS, DHCP, over L3 boundary	•	•	•	•	•
<b>Certifications</b>					
Wi-Fi Alliance Certified*		•	•	•	•
DFS Certified**		221B: Region E, J	Region E	Region E	Region E, A

# FortiAP™ Remote Thin Access Points






	FAP-11C	FAP-14C	FAP-28C		
					
Product Description	Plug & Play Remote Access Point	Remote Access Point	Remote Access Point		
Suggested Deployment	SOHO, Travel, indoor	SOHO, Branch Office, Retail analytic sensor, indoor	SOHO, Branch Office, indoor		
<b>Hardware</b>					
Form Factor	Wall Plug	Desktop	Desktop		
Dimension	4.3 x 3.5 x 1.5 in / 110 x 89 x 34 mm	1.06 x 4.92 x 3.86 in / 27 x 125 x 98 mm	1.38 x 8.43 x 7.09 in / 35 x 214 x 180 mm		
Mounting	Wall Plug	Wall Mountable	Wall Mountable		
Kensington Lock			•		
Ethernet Interfaces	2x GE RJ45	5x FE RJ45	10x GE RJ45		
PoE					
Maximum power draw					
Included accessories	Power plugs	AC adaptor	AC adaptor		
Resilient POE backup					
Plenum installable					
Mesh capable	•	•	•		
<b>Wireless</b>					
IEEE Standard	802.11 b/g/n	802.11 b/g/n	802.11 a/b/g/n		
Number of Radios	1	1	1		
Radio Band	Single	Single	Single		
Radio 1 Band (association rate)	2.4 GHz (150 Mbps)	2.4 GHz (150 Mbps)	2.4 GHz / 5GHz (300 Mbps)		
Radio 2 Band (association rate)	-	-	-		
MIMO	1x1 (1 stream)	1x1 (1 stream)	2x2 (dual stream)		
Max / recommended number of concurrent clients	no limit / 5	no limit / 10	no limit / 20		
Antenna Type and Count	1 - Internal	1 - Internal	2 - Internal		
Antenna Gain	2dBi	2dBi	3dBi/(4dBi-5GHz)		
Max TX Power	17 dBm (50mW)	17 dBm (50mW)	17 dBm (50mW)		
Number of SSIDs	8 (7 client, 1 monitor)	8 (7 client, 1 monitor)	8 (7 client, 1 monitor)		
Traffic Queues	4 queues	4 queues	4 queues		
802.11n 20/40Mhz HT					
802.11n MPDU/MSDU agg					
802.11n Dynamic MIMO PS					
802.11n LDPC encoding					
802.11n MLD					
802.11n Max ratio combining					
802.11ac 80 MHz channel					
<b>Rogue AP scanning</b>					
Dual Band Scanning					
Background Scan					
Full-time dedicated monitor					
Single Radio Dual band scanning					
On-wire MAC address collector					
<b>Management</b>					
WebUI & CLI	•	•	•		
External serial console port					
Cloud deployment/management	•	•	•		
Controller discovery: DNS, DHCP, over L3 boundary	•	•	•		
<b>Certifications</b>					
Wi-Fi Alliance Certified*					
DFS Certified**					

# FortiAP™ Outdoor/Indoor Thin Access Points

	FAP-112B	FAP-222B	FAP-222C		
					
Product Description	Outdoor Access Point	Rugged Outdoor Access Point	Rugged Outdoor Access Point		
Suggested Deployment	Small Outdoor, indoor corridors	Outdoor deployments, warehouse	Outdoor deployments, warehouse		
<b>Hardware</b>					
Form Factor	IP55 enclosure	IP67 enclosure	IP67 enclosure		
Dimension	7.3 x 2.6 x 1.3 in	2.75 x 7.75x10in	9.8 x 8.7 x 2.1 in		
Mounting	Wall/Pole, drywall anchors	Wall or Pole with kit included	Wall or Pole mounting included		
Kensington Lock					
Ethernet Interfaces	2x FE RJ45	1x GE RJ45	1x GE RJ45		
PoE	Proprietary	802.3at & proprietary	Proprietary		
Maximum power draw	12.9 W	25 W	18.4 W		
Included accessories	AC adaptor & proprietary POE injector	AC adaptor & proprietary POE injector, outdoor Kit	AC adaptor & proprietary POE injector, outdoor Kit		
Resilient POE backup					
Plenum installable					
Mesh capable	•	•	•		
<b>Wireless</b>					
IEEE Standard	802.11 b/g/n	802.11 a/b/g/n	802.11 a/b/g/n/ac		
Number of Radios	1	2	2		
Radio Band	Single	Dual	Dual		
Radio 1 Band (association rate)	2.4 GHz (150 Mbps)	2.4 GHz (300 Mbps)	5 GHz a/n/ac (867 Mbps)		
Radio 2 Band (association rate)	-	5 GHz (300 Mbps)	2.4 GHz b/g/n (300 Mbps)		
MIMO	1x1 (1 stream)	2x2 (dual stream)	2x2 (dual stream)		
Max / recommended number of concurrent clients	no limit / 30	no limit / 30 per radio	no limit / 30 per radio		
Antenna Type and Count	1 - Internal	4 N-type External	4 N-type External		
Antenna Gain	8 dBi	5 dBi / 7 dBi for 5 GHz	3.5 dBi / 6 dBi for 5 GHz		
Max TX Power	24 dBm (250mW)	27dBm (500mW)	27dBm (500mW)		
Number of SSIDs	8 (7 client, 1 monitor)	16 (14 client, 2 monitor)	16 (14 client, 2 monitor)		
Traffic Queues	4 queues	4 queues	4 queues		
802.11n 20/40Mhz HT		•	•		
802.11n MPDU/MSDU agg					
802.11n Dynamic MIMO PS					
802.11n LDPC encoding					
802.11n MLD	•				
802.11n Max ratio combining	•				
802.11ac 80 MHz channel			•		
<b>Rogue AP scanning</b>					
Dual Band Scanning		•	•		
Background Scan		•	•		
Full-time dedicated monitor		•	•		
Single Radio Dual band scanning					
On-wire MAC address collector	•	•	•		
<b>Management</b>					
WebUI & CLI	•	•	•		
External serial console port					
Cloud deployment/management	•	•	•		
Controller discovery: DNS, DHCP, over L3 boundary	•	•	•		
<b>Certifications</b>					
Wi-Fi Alliance Certified*		•			
DFS Certified**					



# FortiWiFi™ Indoor Thick Access Points

	FWF-30D	FWF-60D	FWF-80CM	FWF-90D	FWF-92D
					
Suggested Deployment	Home/small office	Distributed office	Distributed office	Indoor Motels, Clinics, Small Enterprise, Retail	Indoor Motels, Clinics, Small Enterprise, Retail
<b>Hardware</b>					
Form Factor	Desktop	Desktop	Desktop	Desktop	Desktop
Dimension	1.38 x 7.17 x 5.24 in	1.50 x 8.50 x 5.83 in	1.75 x 10.87 x 6.13 in	1.72 x 8.5 x 8.78 in	1.72 x 8.5 x 8.78 in
Mounting	Wall, desktop	Wall, desktop	Wall (optional kit with Lock), desktop	Wall, desktop	Wall, desktop
Kensington Lock	•		•	•	•
Ethernet Interfaces	1 x GE RJ45 WAN, 4 x GE RJ45 Switch ports	3 x GE RJ45 WAN/DMZ, 7 x GE RJ45 Switch ports	2 x GE RJ45 WAN, 1 x FE RJ45 DMZ, 6 x FE RJ45 Switch ports	2 x GE RJ45 WAN ports, 14 x GE RJ45 Switch ports	2 x GE RJ45 WAN ports, 14 x GE RJ45 Switch ports
Mesh Root		•	•	•	•
Other WiFi Variants	POE (PSE)	POE (PSE)	-	POE (PSE)	
<b>Wireless</b>					
IEEE Standard	802.11 a/b/g/n	802.11 a/b/g/n	802.11 a/b/g/n	802.11a/b/g/n	802.11a/b/g/n
Number of Radios	1	1	1	1	1
Radio Band	Dual	Dual	Dual	Dual	Dual
Radio 1 Band (association rate)	2.4GHz / 5GHz (300Mbps)	2.4GHz / 5GHz (300Mbps)	2.4GHz / 5GHz (300Mbps)	2.4GHz / 5GHz (300Mbps)	2.4GHz / 5GHz (300Mbps)
Radio 2 Band (association rate)	-	-	-	-	-
MIMO	2x2	2x2	2x3	2x2	2x2
Max / recommended number of concurrent clients	no limit / 30	no limit / 30	no limit / 30	no limit / 30	no limit / 30
Antenna Type and Count	2 F-type antennas	2 di-pole antennas	2 di-pole antennas	2 di-pole antennas	2 di-pole antennas
Antenna Gain	up to 5dB	up to 5dB	up to 5dB	up to 5dB	up to 5dB
Max TX Power	17dBm	17dBm	17dBm	17dBm	17dBm
Number of SSIDs	8 (7 client, 1 monitor)	8 (7 client, 1 monitor)	8 (7 client, 1 monitor)	8 (7 client, 1 monitor)	8 (7 client, 1 monitor)
Traffic Queues	4 queues	4 queues	4 queues	4 queues	4 queues
802.11n 20/40MHz HT	•	•	•	•	•
Short Guard	•	•	•	•	•
802.11ac 80 MHz channel					
MAC Service Data Unit (MSDU) aggregation and MAC Protocol Data Unit (MPDU) frame aggregation	•	•	•	•	•
Cyclic-delay diversity (CDD)	•	•	•	•	•
Power Save (WME-PS)	•	•	•	•	•
802.11n Max ratio combining (MRC)	•	•	•	•	•
Transmit Beam Forming (TxBF)	•	•		•	•
Low Density Parity Check encoding (LDPC)	•	•		•	•
802.11n Maximum Likelihood Detection (MLD)	•	•	•	•	•
<b>Rogue AP scanning</b>					
Dual Band Scanning	•	•	•	•	•
Background Scan	•	•	•	•	•
Full-time dedicated monitor	•	•	•	•	•
Single Radio Dual band scanning	•	•	•	•	•
On-wire MAC address collector	•	•	•	•	•
<b>Management</b>					
WebUI & CLI	•	•	•	•	•
Max managed APs	2	10	32	32	32
Cloud deployment support	•	•	•	•	•
<b>Certifications</b>					
Wi-Fi Alliance Certified*					
DFS Certified**	Region: J	Region: J		Region: J	

# FortiGate/FortiWiFi® Wireless Controller

	FortiGate/FortiWiFi 30D, 40C, 60C & 60D Series	FortiGate/FortiWiFi 80C & 90D Series	FortiGate 1xxC, 100D, 200B	FortiGate 200D Series	FortiGate 3xxB, 300C, 300D, 500D & 62xB
<b>Hardware</b>					
Product Range / Form Factor	Desktop / Desktop	Desktop / Desktop	Mid Range / 1 RU	Mid Range / 1-2 RU	Mid Range / 1 RU
GE Interfaces	5-10	2 - 16	8 - 40	18 - 88	10 - 18
GE PoE/PoE+ Interfaces	1-20 / 4 (FG-30D, 60D, 60C-PoE)	4 (FG-90D-PoE)	16 (FG-140D-PoE)	8 (FG-200D-PoE) 24 (FG-240D-PoE) 32 (FG-280D-PoE)	-
10 GE Interfaces	-	-	-	-	-
40 GE Interfaces	-	-	-	-	-
<b>Capacity</b>					
Maximum Supported APs (Tunnel Mode)	2 - 5	16	32	64	256
Maximum Supported APs (Total)	2 - 10	32	64	128	512
Max number of SSIDs	32	32	256	256	256
Max Concurrent Sessions	40 K - 1.5 Mil	1 - 1.5 Mil	1.4 - 3.2 Mil	1.4 Mil	2 Mil
	FortiGate 600C & 800C	FortiGate 1000 & 3000 Series	FG-5000 Series	FG-VM Series	
<b>Hardware</b>					
Product Range / Form Factor	Mid Range / 1 RU	High End / 2-3 RU	High End / 3-13 RU	-	
GE Interfaces	16-18	18 - 108	2 - 28	Refer to Datasheet	
GE PoE/PoE+ Interfaces	-	-	-	-	
10 GE Interfaces	0 - 2	2 - 28	2 - 112	Refer to Datasheet	
40 GE Interfaces	-	4	-		
<b>Capacity</b>					
Maximum Supported APs (Tunnel Mode)	512	1,024	Up to 14,336 (1,024/blade)	32 - 1,024	
Maximum Supported APs (Total)	1,024	4,096	Up to 53,744 (4,096/blade)	64 - 4,096	
Max number of SSIDs	256	1,024	Up to 14,336 (1,024/blade)	32 - 1,024	
Max Concurrent Sessions	3 - 7 Mil	10 - 44 Mil	10 - 100 Mil	Refer to Datasheet	

\* Certification covers following specifications: - 802.11a/b/g/n, Short Guard Interval, TX A-MPDU, STBC, 40 MHz operation in 5 GHz/WPA™ Personal, WPA™ Enterprise /Personal, WPA2™ , Enterprise / Personal, WMM™, EAP-TLS, EAP-TTLS/MSCHAPV2, PEAPv0/EAP-MSCHAPV2, PEAPv1/EAP-GTC, EAP-SIM, EAP-AKA, EAP-FAST, 802.11 d/h, WMM Power Save.  
 \*\* Requires latest FortiOS version.

This document is provided as a convenient comparison of Fortinet products and services. The datasheet for any product or service can be found on [www.fortinet.com](http://www.fortinet.com) should be consulted for the most updated specifications.

Copyright© 2014 Fortinet, Inc. All rights reserved. Fortinet®, FortiGate®, FortiCare® and FortiGuard®, and certain other marks are registered trademarks of Fortinet, Inc., and other Fortinet names herein may also be registered and/or common law trademarks of Fortinet. All other product or company names may be trademarks of their respective owners. Performance and other metrics contained herein were attained in internal lab tests under ideal conditions, and actual performance and other results may vary. Network variables, different network environments and other conditions may affect performance results. Nothing herein represents any binding commitment by Fortinet, and Fortinet disclaims all warranties, whether express or implied, except to the extent Fortinet enters a binding written contract, signed by Fortinet's General Counsel, with a purchaser that expressly warrants that the identified product will perform according to certain expressly-identified performance metrics and, in such event, only the specific performance metrics expressly identified in such binding written contract shall be binding on Fortinet. For absolute clarity, any such warranty will be limited to performance in the same ideal conditions as in Fortinet's internal lab tests. Fortinet disclaims in full any covenants, representations, and guarantees pursuant hereto, whether express or implied. Fortinet reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable.

WLMTX-2014-R19-DEC